structural bioinformatics - assignment 4

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1 Theory exercises

1.1 Task 1

Mutations are changes in a cells genetic information. They can be classified by their formation or by their impact they have.

They can form by insertion or deletion or the change of a single base in the DNA. But it can also happen that a sequence of bases is inserted or deleted.

If the mutation only consists of one base there are diffrent classifications of the mutation depending on the amino acid that is build with the triplet containing the mutation.

A silent mutation occurs when the change of the base doesn't affect the generation of the amino acid at all. A missense mutation leads to a change of the amino acid and a nonsense mutation causes the build in of an early stop codon.

1.2 Task 2

1.3 Task 3